

WHAT IS CLAIMED IS:

1. An electric power supply unit comprising:

a first electric power supply circuit in which an electric current is
5 supplied from a first power supply line;

a second electric power supply circuit in which an electric current
is supplied from a second power supply line; and

a controlling device which controls operations of both the first
electric power supply circuit and the second electric power supply circuit
10 so as to correlate to each other.

2. The electric power supply unit according to claim 1, wherein
the controlling device controls the operation of the first electric power
supply circuit so as to keep its voltage at a predetermined value, and
15 controls the operation of the second electric power supply circuit so as to
keep its voltage at approximately same value as that of the first electric
power supply circuit.

3. The electric power supply unit according to claim 1, further
20 comprising a detection device which detects an on-off states of the second
power supply line,

wherein the controlling device controls the operations of the first
electric power supply circuit and the second electric power supply circuit
so as to turn the circuits on when the detection device detects an on-
25 status of the second power supply line, and controls the operations of the
circuits so as to turn the circuits off when the detection device detects an
off-status of the second power supply line.

4. The electric power supply unit according to claim 3, wherein a backflow-inhibiting diode is arranged in the second power supply line, the backflow-inhibiting diode making it possible for the detection device to detect the off-status of the second power supply line.

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5. The electric power supply unit according to claim 1, wherein the first electric power supply circuit and the second electric power supply circuit comprise DC-DC converter circuit respectively.

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6. The electric power supply unit according to claim 1, wherein the first power supply line is a backup line equipped in a vehicle, and the second power supply line is an accessory line equipped in the vehicle, electric currents are supplied from one battery through the first power supply line and the second power supply line.

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7. The electric power supply unit according to claim 1, wherein each of the first electric power supply circuit and the second electric power supply circuit functions as a part of an audio equipment.

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8. An electric power supply controlling method comprising the processes of:

controlling an operation of a first electric power supply circuit in which an electric current is supplied from a first power supply line so as to keep its voltage at a predetermined value;

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controlling an operation of a second electric power supply circuit in which an electric current is supplied from a second power supply line so as to keep its voltage at approximately same value as that of the first

electric power supply circuit;

detecting an on-off states of the second power supply line;

controlling the operations of the first electric power supply circuit
and the second electric power supply circuit so as to turn the circuits on

5 when an on-status of the second power supply line is detected; and

controlling the operations of the circuits so as to turn the circuits
off when an off-status of the second power supply line is detected.

9. An electric power supply controlling method comprising:

10 a first controlling process of controlling an operation of a first
electric power supply circuit in which an electric current is supplied from
a first power supply line so as to keep its voltage at a predetermined value;

a second controlling process of controlling an operation of a second
electric power supply circuit in which an electric current is supplied from
15 a second power supply line so as to keep its voltage at approximately same
value as that of the first electric power supply circuit;

a detecting process of detecting an on-off states of the second
power supply line;

a third controlling process of controlling the operations of the first
20 electric power supply circuit and the second electric power supply circuit
so as to turn the circuits on when an on-status of the second power
supply line is detected;

a fourth controlling process of controlling the operations of the
circuits so as to turn the circuits off when an off-status of the second
25 power supply line is detected;

a determining process of determining whether or not the first and
second controlling processes are necessary; and

a switching process of switching between the implementation and the termination of the first and second controlling processes in response to a determination result in the determining process.